UK Subject to change
D Änderungen vorbehalten
NL Wijzigingen voorbehouden
F Sous réserve de modifications
S Ändringar förbehålles
SF Pidätämme oikeuden muutoksiin
N Rett till endringer forbeholdes
DK Ret til ændringer forbeholdes
E Reservado el derecho de modificaciones technicas
P Reservado o direito a modificações
I Con reserva di modifiche
H Változtatás jogát fenntartjuk
CZ Změny vyhrazeny
R Компания Ferm постоянно совершенствует выпускаему ю ею проедукцию. Поэтому в техничесие характеристики могут вноситься без предварительного уведомления.
GR ηρούμε το δικαίωμα αλλαγών
TR Değişiklikler mümkündür

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0207/29

USER'S MANUAL

Ferm Rotary Hammer

FBH-620

CE

Ferm®

Art.nr. 727405
Screwfix nr. 94802

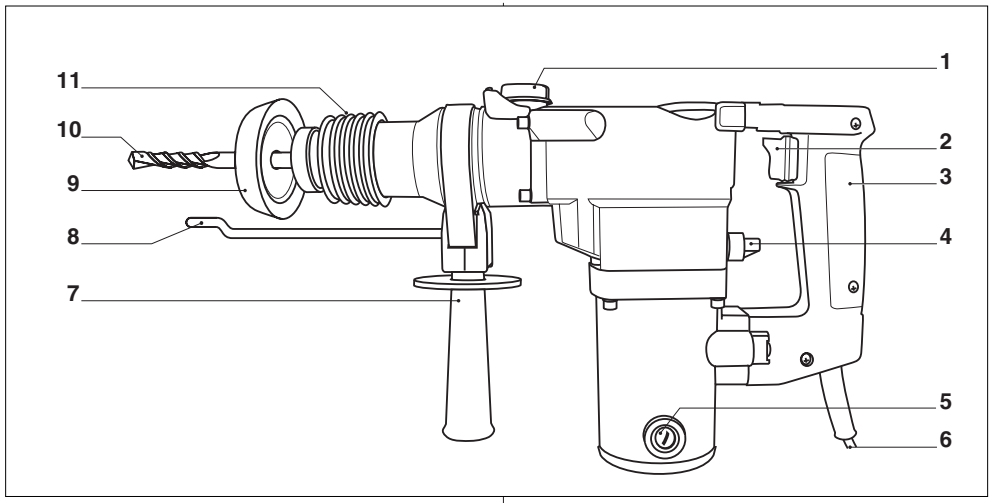


Fig.A.

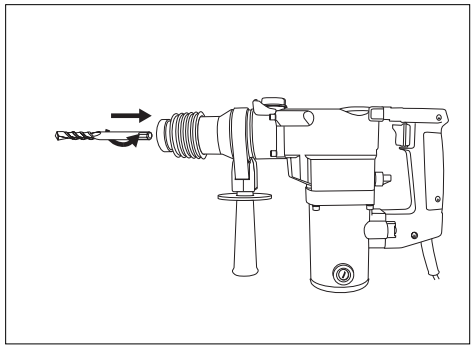


Fig.B.

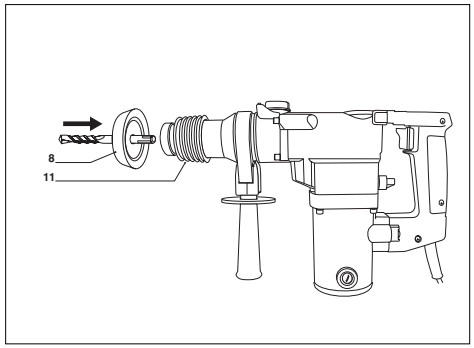


Fig.C.

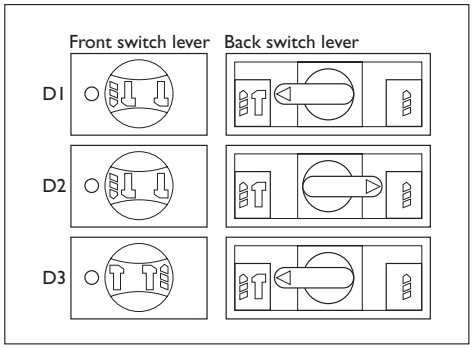


Fig.D.

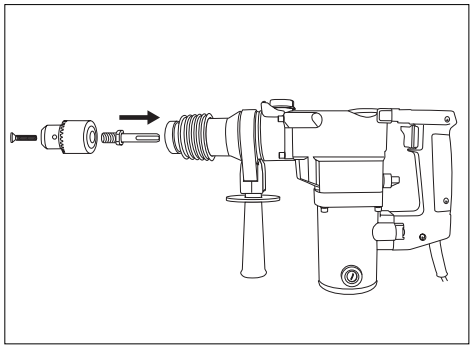
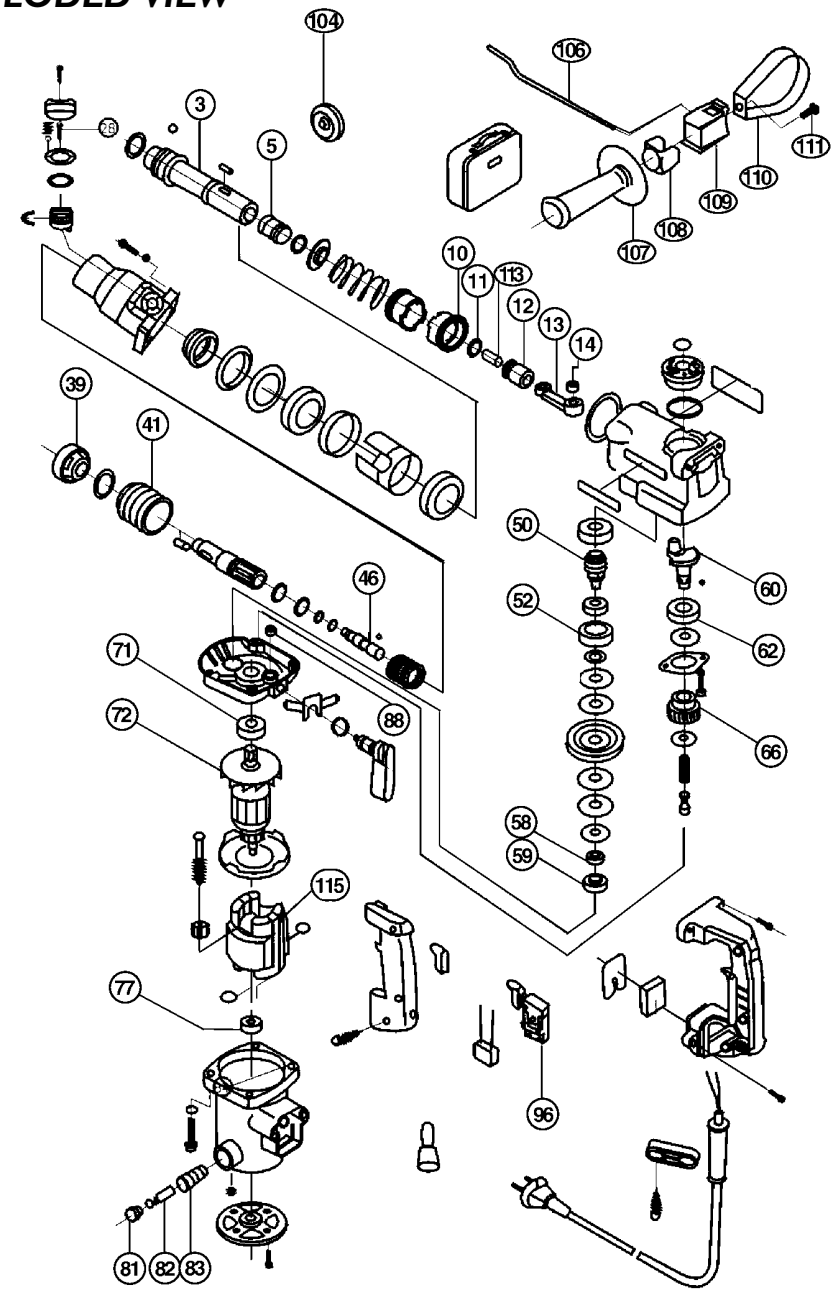


Fig.E.

EXPLODED VIEW



SPARE PARTS

REF. NR.	DESCRIPTION	FERM NR.
700150	CYLINDER	003
700151	HAMMER CYLINDER	005
700152	UMBRELLA GEAR (BIG	010
700153	O-RING	011
700154	PISTON	012
700155	RECIPROCAL LEVEL	013
700156	BUSHING	014
700157	FRONT COVER	039
700158	SLEEVE	041
700159	HAMMER BLOCK	046
700160	UMBRELLA GEAR (SMALL)	050
806002	BALL BEARING 6002 ZZ	052
700161	SPECIAL NUT	058
800627	BALL BEARING 627 ZZ	059
700162	ECCENTRIC SHAFT	060
806202	BALL BEARING 6202 ZZ	062
700163	NO.1 GEAR	066
806001	BALL BEARING 6001 ZZ	071
700164	ROTOR	072
800608	BALL BEARING 608 ZZ	077
700165	BRUSH COVER	081
700166	CARBON BRUSH SET	082
700167	BRUSH HOLDER	083
700168	NEEDLE BEARING	088
700169	SWITCH	096
700170	DUST COVER	104
700171	DEPTH GAUGE	106
700172	HANDLE COMPLETE	107 T/M 111
700173	PIN	113
700174	STATOR	115

UK English

ELECTRIC ROTARY HAMMER DRILL

THE NUMBERS IN THE FOLLOWING TEXT CORRESPOND WITH THE PICTURES AT PAGE 2.

INTENDED USE

The Ferm FBH-620 is intended to be used for drilling holes in material like stone, concrete and similar materials. With suitable drill bits the machine also can be used to drill holes in wood or metal. The machine can be used as a demolition hammer in combination with the appropriate chisels. All other purposes are explicitly excluded.

TECHNICAL SPECIFICATIONS

Voltage		230V~
Frequency		50 Hz
Input power		620W
Speed, no load		750/min
Impact rate		2920/min
Max. drilling capacity	concrete	Ø 26 mm
	steel	Ø 13 mm
	wood	Ø 40 mm
Weight		5.3 kg
Lpa Sound pressure level		93 dB(A)
Lwa Sound power level		106 dB(A)
Vibration		5.6 m/s^2

PACKAGE CONTENTS

Check the machine and accessories for transport damage.

PRODUCT INFORMATION

Fig.A - Description

1. Rotary stop selection lever
2. On-off Switch
3. Main handle
4. Hammer stop selection lever
5. Carbon brush cap
6. Electric cord
7. Auxiliary handle
8. Depth gauge
9. Dust cap
10. Drill
11. Locking sleeve

SAFETY INSTRUCTIONS

The following symbols are used in these instructions for use:

Denotes risk of personal injury, loss of life or damage to the tool in case of non-observance of the instructions in this manual.

Denotes risk of electric shock.

Carefully read this manual before using the machine. Make sure that you know how the machine functions and how to operate it. Maintain the machine in accordance with the instructions to make sure it functions properly. Keep this manual and the enclosed documentation with the machine.

Electrical safety

Warning! When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before attempting to operate this product and save these instructions.

Always check that the voltage corresponds to the voltage on the rating plate.

The machine is double insulated in accordance with EN50144; therefore no earth wire is required.

Replacing cables or plugs

Immediately throw away old cables or plugs when they have been replaced by new ones. It is dangerous to insert the plug of a loose cable in the wall outlet.

Using extension cables

Only use an approved extension cable suitable for the power input of the machine. The minimum conductor size is 1.5 mm^2. When using a cable reel always unwind the reel completely.

GENERAL SAFETY INSTRUCTIONS

Warning! When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following. Read all these instructions before attempting to operate this product. Retain for future refence.

1. **Keep work area clear.**
   Cluttered areas and benches invite injuries.
2. **Consider work area environment.**
   Do not expose power tools to rain. Do not use power tools in damp or wet locations. Keep work area well lit. Do not use power tools in presence of flammable liquids or gases.
3. **Guard against electric shock.**
   Prevent body contact with grounded surfaces (e.g. pipes, radiators, refrigerators).
4. **Keep children away.**
   Children should be kept away from the work area at

all times. Do not let children handle the Electric Rotary Hammer Drill at any time.

5. **Store unused tools.**
   When not is use keep tools out of reach of children. Store in a dry and secure location.
6. **Do not force tool.**
   Do not apply undue pressure as this may affect performance and may cause damage to the machine. Forcing the job also increases the potential for accidents.
7. **Use right tool.**
   Do not force small tools or attachments to do the job of heavy duty tool. Do not use a Angle Grinder for purposes not intended.
8. **Dress properly.**
   Do not wear loose clothing or Jewellery. They can be caught in moving parts. Rubber gloves and nonskid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
9. **Use safety glasses.**
   Also use face or dust mask if cutting operation is dusty.
10. **Do not abuse cord.**
    Never carry tool by cord or yank it to disconnect it from electrical socket. Keep cord from heat, oil and sharp edges.
11. **Secure work.**
    Use clamps or a vice to hold work. It's safer than using your hand and it frees both hands to operate tool.
12. **Do not overreach.**
    Keep proper footing and balance at all times.
13. **Maintain tools with care.**
    Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.
14. **Disconnect tools.**
    When not in use, before servicing, and when changing accessories such as blades, bits and cutters.
15. **Remove adjusting keys and wrenches.**
    Form the habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
16. **Avoid unintentional starting.**
    Do not carry plugged-in tools with finger on switch. Be sure switch is off when plugging in.
17. **Outdoor use extension cords.**
    When tool is used outdoors, use only extension cords intended for use outdoors and so marked. Always use tool in conjunction with a residual circuit breaker device.
18. **Stay alert.**
    Watch what you are doing. Use common sense. Do not operate tool when you are tired.
19. **Check damaged parts.**
    Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service centre unless otherwise indicated elsewhere in this instructions manual. Have defective switches replaced by an authorized centre. Do not use tool if switch does not turn it on and off.
20. **Warning.**
    The use of any other accessory or attachment other than recommended in this operation instructions or the catalogue may present a risk of personal injury.
21. **Have your tool repaired by an expert.**
    This appliance is manufactured to very high standards and meets relevant safety regulations. Repairs should only be done by a suitable qualified electrical engineer or otherwise.

SPECIAL SAFETY INSTRUCTIONS

BEFORE USING THE APPLIANCE

1. Examine the drilling surface for hidden electric cables, gas pipes or other obstacles with e.g. metal detector.
2. Check the following points:
   - Does the voltage of the motor correspond with the mains power supply?
   - Are the extension cable, cord insulation and plug in good condition: sturdy, not loose or damaged?
   - Is there a good connection at the socket?
   - Is the drill running abnormally, overheating or generating excessive sparks?
   - Should any of the above problems be observed cease all further use and make immediate repairs.

OPERATION

Hammer drilling requires low operator pressure. An excess of pressure can cause the motor to be unnecessarily overloaded.

MANUAL SIDE GRIP

The manual side grip can be rotated to either side of the machine to ensure safe and comfortable operation for both left and right-handed operators.

1. Loosen the grip by turning anti-clockwise.
2. Rotate the grip to the desired position.
3. Tighten the grip firmly.

CHANGING AND REMOVING DRILL BITS

Fig. B

Before changing drill bits check that the mains plug has been removed from the socket.

Check drill bits regularly
Blunt drill bits should be re-sharpened or replaced

1. Lightly lubricate the shaft of the drill bit before inserting into the machine.
2. Place the shaft of the drill bit into the opening of the drill chuck and twist until latched.
3. To release and remove the drill bit pull back the collar of drill chuck .

ADJUSTING DEPTH STOP

1. Loosen the manual side grip.
2. Place the straight part of the depth stop through the hole in the grip.
3. Adjust the stop to the desired bit depth.
4. Tighten the grip firmly.

INSTALLING DUST CATCHER

Fig. C

The dust catcher prevents large amounts of drilling dust entering the machine when drilling into ceilings.

1. Remove the drill bit.
2. Slide the dust catcher over the shaft of the drill bit.
3. Place the drill bit with catcher in the drill chuck.
4. Always replace a damaged dust catcher immediately.

MODE SELECTOR SWITCH

Fig. D

The correct switch lever positions required for each drilling mode are indicated in the diagram at page 2.
D1 = hammerdrilling .
D2 = drilling.
D3 = chiseling.

SWITCHING ON AND OFF

To start drill: depress ON/OFF switch.
To stop drill: release ON/OFF switch.

DRILL WITH DRILL CHUCK ADAPTER

Fig. E

When drilling steel, wood and plastic, it is advisable to use the ring gear chuck and the drill chuck adapter.

TROUBLESHOOTING

Motor does not rotate upon switching on power supply

- Power supply breakage
  Inspect power supply
- Poor switch contact
  Repair or replace ON/OFF switch
- Mains voltage too low
  - *Extension cord too long/ too thin*
- Motor damaged
  Repair your machine by an expert.
- Worn out brushes
  Replace carbon brushes

Motor generates abnormal noise and rotates slowly or not at all

- Motor overloaded due to excessive pressure or drilling depth
  Reduce pressure or drilling depth, decrease force
- Motor damaged
  Repair your machine by an expert.
- Main power supply voltage too low
  Adjust main power supply voltage
- Worn out brushes
  Replace carbon brushes

Overheating of gearbox surface

Overloading or blunt drill bit
Reduce load or sharpen drill bit
Decreased voltage
Adjust main power supply voltage

Heavy sparking of the motor

Check if carbon brushes are not worn out.

MAINTENANCE

Make sure that the machine is not live when carrying out maintenance work on the motor.

REPLACING CARBON BRUSHES

- To check or replace the carbon brush loosen the cap with a screwdriver.
- Remove the carbon brush and replace if necessary.
- Tighten the carbon brush cap.
- Change both carbon brushes simultaneously.
- Check regularly for wear and tear.
- Always change well worn carbon brushes.
- Always keep carbon brushes clean and free of hindrance.

DEFECTS

The machine should be checked regularly for any of the following obvious defects and repairs carried out as necessary.

- Cable damage
- Switch malfunction
- Short circuits
- Damage to moving parts

Cleaning

The machine housing and drill bit chuck should be cleaned regularly, preferably after each use. The ventilation slots should be kept free from dust and dirt.
If the dirt does not come off use a soft cloth moistened with soapy water. Never use solvents such as petrol, alcohol, ammonia water, etc. These solvents may damage the plastic parts.

Lubrication

Have your local Ferm dealer top up the lubrication grease.

Faults

1. In the event of malfunction please contact your local Fem dealer. Our company is not responsible for inappropriate use or repairs carried out by a non-approved expert.
2. No further notice will be given of changes in technical specifications and spare parts resulting from product development.
3. In the back of this manual you find an exploded view showing the parts that can be ordered.

ENVIRONMENT

In order to prevent the machine from damage during transport, it is delivered in a sturdy packaging. Most of the packaging materials can be recycled. Take these materials to the appropriate recycling locations.
Take your unwanted machines to your local Ferm-dealer. Here they will be disposed of in an environmentally safe way.

GUARANTEE

The guarantee conditions can be found on the separately enclosed guarantee card.

For any queries relating to operational or safety matters contact:
Ferm Customer Helpline on: **0115 966 1199**
Monday-Friday **8am – 6pm**
Saturday **9am – 1 pm**

CE DECLARATION OF CONFORMITY (UK)

We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents

EN50144-1, EN-50144-2-6,
EN50155-2-6,
EN55014-1, EN55014-2,
EN61000-3-2, EN61000-3-3

in accordance with the regulations.

98/37EEC,
73/23/EEC,
89/336EEC

from 01-06-2002
GENEMUIDEN NL
W. Kamphof
Quality department